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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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GEORGE W. WASSON
3123 INDIAN WAY
LAFAYETTE, CA 94549

EXAMINER

OLSON, LARS A

ART UNIT PAPER NUMBER

3617

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/629,539

Applicant(s)

PAULO, DOUGLAS G.

Examiner

Lars A Olson

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. An amendment was received from the applicant on July 1, 2004.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherman (US 3,793,980) in view of Kobayashi et al. (US 3,811,399).

Sherman discloses a marine propulsion system, as shown in Figures 1-17, for a propeller driven boat, said system including a tunnel structure, as shown in Figure 2, that accommodates a propeller shaft, defined as Part #46, with a propeller, defined as Part #50, between a forward end and a trailing end of said tunnel structure, where said tunnel structure assists in the movement of said boat from a starting attitude to a planing attitude, as described in lines 20-38 of column 2.

Sherman, as set forth above, discloses all of the features claimed except for the use of a constant radius extension of said tunnel structure that extends from a position of said propeller within said tunnel structure to the stern of said boat.

Kobayashi et al. discloses an inboard motor boat, as shown in Figures 1 and 2, with a tunnel structure, defined as Part #5, that accommodates a propeller shaft,

defined as Part #22, and a propeller, defined as Part #29, where said tunnel structure has a constant radius extension, as shown in Figures 1 and 2, that extends from a position of said propeller within said tunnel structure to the stern of said boat, as described in lines 26-41 of column, and said constant radius extension is a part of said tunnel structure beginning at the position of said propeller within said tunnel at its forward end, and extending toward and attached to said stern at its trailing end, as shown in Figures 1 and 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize a tunnel structure on a boat hull having a constant radius extension between a propeller and a stern of said boat hull, as taught by Kobayashi et al., in combination with the marine propulsion system as disclosed by Sherman for the purpose of providing a boat hull with improved handling during operation.

Allowable Subject Matter

4. Claim 7 is allowed.
5. Claims 3-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed on July 1, 2004 regarding claims 1 and 2 have been fully considered but they are not persuasive.

7. The applicant argues that Kobayashi et al. (US 3,811,399) discloses a boat having a tunnel that accommodates a propeller with an extension of said tunnel aft of said propeller that increases in area aft of said propeller and at the stern of said boat, and thus does not have a constant radius.

In response to the applicant's argument, Kobayashi et al. discloses a boat with a tunnel extension beginning aft of a propeller and extending to the stern of said boat, where said tunnel extension has a constant radius between said propeller and said stern, as shown in Figure 2, and described in lines 26-41 of column 2. Specifically, Kobayashi et al. describes said tunnel extension as an open chamber, defined as Part #5, that is substantially semi-circular, has almost constant breadth between opposing edges of said open chamber, and has opposing sidewalls that extend in parallel to each other. It is also stated that the depth of said open chamber is kept substantially constant in the vicinity of the stern of said boat, as shown in Figure 2. Thus, a semi-circular tunnel extension with a constant depth and parallel sidewalls necessitates said tunnel extension having a constant radius. Therefore, for the reasons given above, the rejection of claims 1 and 2 is deemed proper and is not withdrawn.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication from the examiner should be directed to Exr. Lars Olson whose telephone number is (703) 308-9807.

lo

September 2, 2004

LARS A. OLSON
PATENT EXAMINER

Lars Olson
9/2/04